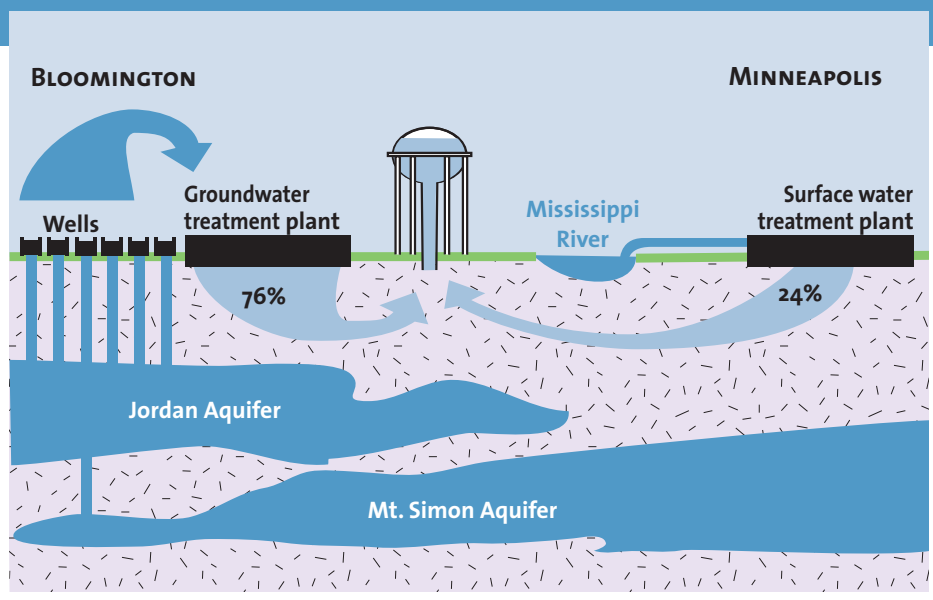
In a world where an estimated three million people die every year from preventable waterborne disease, water systems in North America allow us to drink from virtually any public tap with a high assurance of safety. In the United States, water utilities monitor for more than 100 contaminants and must meet close to 90 regulations for water safety and quality. These water standards are among the world's most stringent. Without our modern water systems, diseases such as cholera and dysentery would be part of everyday life.

American Water Works Association

Where does your tap water come from?



Completed in 2002, the remodeled Sam H. Hobbs Water Treatment Plant can produce up to 14 million gallons of treated, drinkable water per day.

Bloomington Wells
76 Percent in 2006

In 2006, our water plant drew raw (untreated) groundwater from six deep wells. The wells extend downward between 376 and 963 feet into the Jordan, Prairie Du Chien-Jordan, Franconia-Mount Simon and Jordan-St. Lawrence Aquifers, porous underground rock formations that hold vast amounts of water. The midwest has a very rich water supply.

The City drew 3.6 billion gallons of water, 76 percent of Bloomington's needs, from these deep groundwater wells in 2006.

Mississippi River
24 Percent in 2006

To meet demand in excess of our production capabilities, we purchased treated water from the city of Minneapolis. Treated water from our plant is blended with similarly treated water from Minneapolis and sent throughout our City's distribution system. All of our consumers receive a blend of water from these two sources.

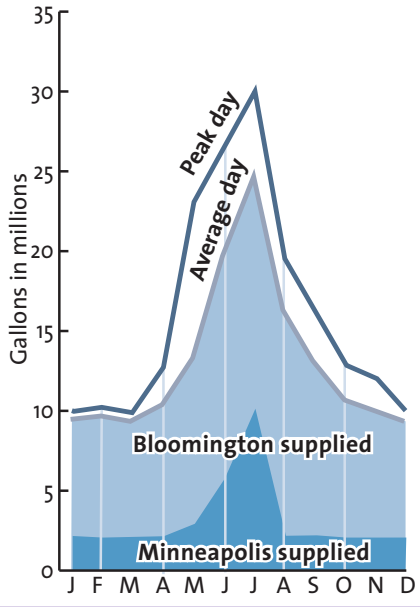
Minneapolis' surface water treatment plant takes its raw water from the Mississippi River. In 2006, the City purchased 1.18 billion gallons of water from Minneapolis, which supplied the remaining 24 percent of our water needs.

How much is used?

In 2006, residents and businesses in Bloomington used 4.8 billion gallons of water on average, up from 4.5 billion in 2005. This worked out to about 13.1 million gallons of water per day last year.

The chart below shows the peak day and average day of water use for each month during 2006, as well as the average amount of water treated at our plant and purchased from Minneapolis. To get a more accurate picture of the actual amounts of water consumed, peak day data was adjusted to account for fluctuations in our reservoir levels.

2006 Peak day and average day water use per month



The treatment process

1 Treatment begins when lime, in the form of slakened quicklime (CaO), is mixed with raw water in one of our two contact solids basins. Each basin holds about half a million gallons of water.

2 The lime-and-water mixture causes the pH in the basins to rise, and calcium and magnesium (the main components of hardness) to form insoluble particles called flocs. As these floc particles grow in size, they settle to the bottom of the contact solids basins. The solids are removed, dewatered and used as a USDA-approved source of lime by Minnesota farmers to stabilize the pH in farm fields.

3 The water enters a recarbination basin where it is adjusted to the proper pH by adding carbon dioxide. A precise amount of chlorine is added to discourage bacterial growth as the water travels through our distribution system.

4 The water is filtered to remove any remaining particles. And finally, it enters an underground reservoir called a clearwell where small quantities of fluoride and ammonia are added. Fluoride promotes strong teeth and bones; ammonia works with the chlorine as a disinfectant. Now softened and disinfected, the water is ready for use by Bloomington residents and businesses.

5 The finished water from our treatment plant is pumped into the distribution system, where it is mixed with treated water purchased from the City of Minneapolis.

How soft is our water?

Bloomington is one of the few water utilities in Minnesota that supplies softened water to its consumers. Untreated groundwater enters the water plant with a hardness of about 19 grains (320 parts per million). Our treatment process reduces the water's hardness to about 5.2 grains (90 parts per million).